(Q)SAR Directed Design, Synthesis and Evaluation of Anti-Invasive Chalcones and Analogues

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The processes of invasion and metastasis account for 90% of human cancer fatalities. Since no efficient drugs tackling these phenomena are available in the clinic today, their development represents a cardinal challenge in contemporary cancer research.

We have embarked on a QSAR-directed search for potent anti-invasive compounds, starting from natural chalcones. *Via* an *in vitro* feedback loop, we were able to identify several interesting lead candidates. Furthermore, one compound was taken to the *in vivo* level and showed promising behavior in a xenograft model in nude mice.